

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-13. (withdrawn)

14. (currently amended) A process for extracting and refining the components of pea flour, which comprises the following steps:

- a) preparing a pea flour by grinding dried peas which have been previously cleaned, sorted, blanched, freed of dust,
- b) placing the flour thus obtained in water,
- c) selecting an industrial starch unit for the treatment of potato,
- d) separating the components of the pea flour using at least one piece of equipment in said industrial starch unit selected from the group consisting of hydrocyclones, centrifugal decanters and sieves, ~~in a configuration used in a potato starch factory,~~ without a step for separating the internal fibers of the pea being carried out beforehand,
- e) collecting the protein component and/or the starch component of said pea flour.

15. (currently amended) The process as claimed in claim 14, wherein the pieces of equipment in said industrial starch unit are centrifugal decanters and sieves.

16. (currently amended) A process for extracting and refining the components of pea flour, which comprises of the following steps:

- a) preparing a pea flour by grinding dried peas which have been previously cleaned, sorted, blanched, freed of dust, and suspending the pea flour in water,
- b) selecting an industrial starch unit for the treatment of potato,
- c) fractionating said suspension on centrifugal decanters in said industrial starch unit, ~~in a configuration used in a potato starch factory,~~ so as to isolate a fraction rich in proteins and solubles from a fraction consisting of the starch and internal fiber mixture,
- d) ~~e~~ isolating the protein component of said fraction rich in proteins and solubles by a selective protein purification technique,
- e) ~~d~~ treating the fraction consisting of the mixture of starch and internal fibers on sieves in said industrial starch unit, ~~in a configuration used in a potato starch factory,~~ so as to separate a fraction rich in internal fibers from a fraction rich in starch,
- f) ~~e~~ isolating the starch component of said fraction rich in starch,
- g) collecting said protein component and/or said starch component.

17. (currently amended) The process as claimed in claim 14, wherein the pieces of equipment in said industrial starch unit are hydrocyclones and centrifugal decanters.

18. (currently amended) A process for extracting and refining the components of pea flour, which comprises the following steps:

- a) preparing a pea flour by grinding dried peas which have been previously cleaned, sorted, blanched, freed of dust, and suspending the pea flour in water,
- b) selecting an industrial starch unit for the treatment of potato,
- c) fractionating said suspension on hydrocyclones in said industrial starch unit, in a configuration used in a potato starch factory, so as to isolate a fraction rich in starch from a fraction consisting of a mixture of protein, internal fiber and solubles,
- d) ~~e~~ optionally concentrating the suspension rich in starch on said hydrocyclones so as to purify the starch thereof,
- e) ~~d~~ treating the fraction consisting of the mixture of proteins, internal fibers and solubles on centrifugal decanters in said industrial starch unit, in a configuration used in a potato starch factory, so as to separate a fraction rich in internal fibers from a fraction rich in proteins and solubles,
- f) ~~e~~ isolating the protein component of said fraction rich in proteins and solubles by a selective protein purification technique,
- g) collecting said protein component and/or said starch component.

19. (previously presented) The process as claimed in claim 18, wherein the pea flour is suspended in water at a pH between 6.2 and 7, at room temperature and for 30 min.

20. (previously presented) The process as claimed in claim 14, wherein the proteins ~~are~~ component is purified using a technique selected from the group consisting of techniques of precipitation of proteins at their isoelectric pH and of membrane separation of the ultrafiltration type.

21. (currently amended) A process for extracting and refining the components of pea flour, comprising at least one step carried out in an industrial starch unit for the treatment of potato, wherein said step is for separating said components of pea flour using at least one piece of equipment of said industrial starch unit selected from the group consisting of hydrocyclones, centrifugal decanters and sieves, ~~in a configuration used in a potato starch factory.~~

22. (currently amended) A process for extracting and refining the components of pea flour, comprising at least one step carried out in an industrial starch unit for the treatment of potato, wherein said step is for separating said components of pea flour using sieves and centrifugal decanters of said industrial starch unit, in ~~a configuration used in a potato starch factory.~~

23. (currently amended) A process for extracting and refining the components of pea flour, comprising at least one step carried out in an industrial starch unit for the treatment of potato, wherein said step is for separating said components of pea flour using hydrocyclones and centrifugal decanters of said industrial starch unit, in a configuration used in a ~~potato starch factory.~~

24. (currently amended) A process for extracting and refining starch from the components of pea flour, which comprises the following steps:

- a) preparing a pea flour by grinding dried peas which have been previously cleaned, sorted, blanched, freed of dust, and suspending the pea flour in water, without correcting the pH of the suspension,
- b) selecting an industrial starch unit for the treatment of potato,
- c) fractionating said suspension on hydrocyclones in said industrial starch unit, so as to isolate a fraction rich in starch from a fraction consisting of a mixture of protein, internal fiber and solubles,
- d) ~~e)~~ optionally concentrating the suspension rich in starch on said hydrocyclones so as to purify the starch thereof
- e) collecting the starch component of said pea flour.
- ~~d) treating the fraction consisting of the mixture of proteins, internal fibers and solubles on centrifugal decanters, so as to separate a fraction rich in internal fibers from a fraction rich in proteins and solubles,~~
- ~~e) isolating the protein component of said fraction rich in proteins and solubles by a selective protein purification technique.~~

25. (new) A process for extracting and refining proteins from the components of pea flour, which comprises the following steps:

- a) preparing a pea flour by grinding dried peas which have been previously cleaned, sorted, blanched, freed of dust, and suspending the pea flour in water, without correcting the pH of the suspension,
- b) selecting an industrial starch unit for the treatment of potato,

c) fractionating said suspension on hydrocyclones in said industrial starch unit, so as to isolate a fraction rich in starch from a fraction consisting of a mixture of protein, internal fiber and solubles,

~~d) optionally concentrating the suspension rich in starch on said hydrocyclones so as to purify the starch thereof.~~

d) treating the fraction consisting of the mixture of proteins, internal fibers and solubles on centrifugal decanters, so as to separate a fraction rich in internal fibers from a fraction rich in proteins and solubles,

e) isolating the protein component of said fraction rich in proteins and solubles by a selective protein purification technique,

f) collecting said protein component.